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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,729	07/02/2003	Kevin T. Chan	14227US01	5781
23446	7590	01/29/2009	EXAMINER	
MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661				DAVENPORT, MON CHERI S
ART UNIT		PAPER NUMBER		
2416				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/612,729	CHAN, KEVIN T.	
	Examiner	Art Unit	
	MON CHERI S. DAVENPORT	2416	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 27 October 2008.
- 2a) This action is **FINAL**. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-30 is/are pending in the application.
 - 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-4, 6, 9-14, 16, 19-24, 26, 29 and 30 is/are rejected.
- 7) Claim(s) 5, 7, 8, 15, 17, 18, 25, 27, and 28 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____ .
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)	5) <input type="checkbox"/> Notice of Informal Patent Application
Paper No(s)/Mail Date _____ .	6) <input type="checkbox"/> Other: _____ .

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 1-4, 6, 9, 11-14, 16, 19, 21-24, 26 and 29** rejected under 35 U.S.C. 102 (a) as being anticipated by Applicant's admitted prior art (APA).

Regarding **Claims 1, 11, and 21** applicant's admitted prior art discloses a method for providing and configuring communication links, the method comprising:

determining any one usable media pair from all existing media pairs(see APA [04], lines 1-6, auto-MDIX reconfigure channels to properly reassign the media pairs to channels, therefore a usable media pair is determined from all existing media pairs, see also [12], and fig. 1, the first controller and the second controller is independent and all existing media pair for each controller are independent devices));

selecting any one channel from all existing channels (see [04], lines 1-6, auto-MDIX reconfigure channels to properly reassign the media pairs to channels, therefore a channel is determined from all existing channels , see also [12], and fig. 1, the first controller and the second controller is independent and all existing channels for each controller is independent); and

assigning said selected any one channel to said any one media pair(see [04], lines 1-6, auto-MDIX reconfigure channels to properly reassign the media pairs to channels).

Regarding **Claims 2, 12 and 22** applicant's admitted prior art discloses everything as claimed above (see claims 1, 11 and 21). In addition, the method includes:

wherein said determining further comprises monitoring at least said any one usable media pair(see APA [06] lines 1-4, Ethernet@wirespeed is adapted to detect the conditions on the media and the coupling interface, media pairs are monitored).

Regarding **Claims 3, 13 and 23** applicant's admitted prior art discloses everything as claimed above (see claims 2, 12 and 22). In addition, the method includes:

wherein said monitoring further comprises detecting an existence of a communication signal on said any one usable media pair(see APA [06], lines 1-9, Ethernet@wirespeed is used when channel or media characteristics have degraded, therefore usable media pairs are monitored in order to adapt and mitigate the problem).

Regarding **Claims 4, 14 and 24**, applicant's admitted prior art discloses everything as claimed above (see claims 1, 11, and 21). In addition, the method includes:

further comprising determining which one of said all existing media pairs facilitates communication at a maximum communication speed (see APA [06], Ethernet@wirespeed is useful when channel or media is degraded, Ethernet@wirespeed automatically shift to maximum communication speed).

Regarding **Claim 6, 16, 26**, applicant's admitted prior art discloses everything as claimed above (see claims 1, 11, and 21). In addition, the method includes:

further comprising determining which one of said all existing media pairs facilitates operating at a reduced communication speed (see APA [06], Ethernet@wirespeed is useful when channel or media is degraded, Ethernet@wirespeed automatically shift or reduce transmission speed).

Regarding **Claims 9, 19, and 29**, applicant's admitted prior art discloses everything as claimed above (see claims 1, 11, and 21). In addition, the method includes:

further comprising identifying a status of at least one of said all existing media pairs and at least one of said all existing channels (see APA [06] lines 1-4, Ethernet@wirespeed is adapted to detect the conditions on the media and the coupling interface, media pairs are monitored).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 10, 20, and 30** rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's admitted prior art in view of Bontemps et al. (US Patent Number 5,923,663).

Regarding **Claims 10, 20, and 30**, applicant's admitted prior art discloses everything as claimed above (see claims 9, 19, and 29). In addition, the method includes:

However applicant's admitted prior fail to specifically point out further comprising storing said identified status as claimed.

Bontemps et al. teaches storing said identified status (see column 3, lines 50-52, the physical layer device monitors its receive input for transmitted communication signals and provided a link detect signal indicative thereof, which reads on storing of status, see also col. 13, lines 30-45, the LINK_DETECTx signals are used in a logic state machine, which stores current state of the ports).

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to combine applicants admitted prior art with Bontemps et al. because Bontemps et al. invention provides a solution to achieve the appropriate communication link automatically regardless of cable type(see Bontemps et al. col. 3, lines 39-41).

Allowable Subject Matter

5. **Claims 5, 7, 8, 15, 17, 18, 25, 27, and 28** objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

Applicant's arguments filed 10/27/2008 have been fully considered but they are not persuasive.

In the remarks on pgs. 15-17 of the amendment, the applicant contends that Applicant's admitted prior art does not teach or suggest "determining any one usable media pair from all existing media pairs of a first device"

Examiner respectfully disagrees Applicant's admitted prior art teaches auto-MDIX reconfigure channels to properly reassign the media pairs to channels, which reads on the broad

claim language as presented. The controllers of figure 1 are independent and interpreted as a device.

In the remarks on pgs. 17-19 of the amendment, the applicant contends that Applicant's admitted prior art in view of Bontemps et al. does not teach or suggest "wherein said determining further comprises monitoring at least said any one usable pair"

Examiner respectfully disagrees Applicant's admitted prior art teaches Ethernet@wirespeed monitors at least any one usable media pair, reads on the claim limitation as presented.

In the remarks on pgs. 19-21 of the amendment, the applicant contends that Applicant's admitted prior art in view of Bontemps et al. does not teach or suggest "comprising determining which one of said all existing media pairs is capable of facilitating communication at a maximum communication speed and at a reduced communication speed"

Examiner respectfully disagrees Applicant's admitted prior art teaches Ethernet@wirespeed is useful when channel or media is degraded, Ethernet@wirespeed automatically shift to maximum communication speed, and Ethernet@wirespeed automatically shift or reduce transmission speed, which reads on the claim language as presented.

In the remarks on pg. 24 of the amendment, the applicant contends that Applicant's admitted prior art in view of Bontemps et al. does not teach or suggest "comprising identifying a status of at least one of said all existing media pairs and at least one of said all existing channels"

Examiner respectfully disagrees Applicant's admitted prior art teaches Ethernet@wirespeed is adapted to detect the conditions on the media and the coupling

interface, media pairs are monitored, detecting and monitoring is identifying, which reads on the claim language as presented.

In the remarks on pgs. 25-26 of the amendment, the applicant contends that Applicant's admitted prior art in view of Bontemps et al. does not teach or suggest "storing said identified status"

Examiner respectfully disagrees Applicant's admitted prior art in view of Bontemps et al. teaches the the LINK_DETECTx signals are used in a logic state machine, which stores current state of the ports.

6. Applicant's arguments see pg. 20-24, filed 10/27/2008, with respect to claims 5, 7, 8, 15, 17, 18, 25, 27, and 28 have been fully considered and are persuasive. The rejection under 35 USC 102 of claims 5, 7, 8, 15, 17, 18, 25, 27, and 28 has been withdrawn.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MON CHERI S. DAVENPORT whose telephone number is (571)270-1803. The examiner can normally be reached on Monday - Friday 8:00 a.m. - 5:00 p.m. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kevin C. Harper/
Primary Examiner, Art Unit 2416

/Mon Cheri S Davenport/
Examiner, Art Unit 2416
January 26, 2009